UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA

UNITED STATES OF AMERICA,	)	
	)	
Plaintiff	)	
	)	
and	)	CIVIL ACTION NO. 00-CV-2756
	)	
THE STATE OF MINNESOTA,	)	
	)	
Plaintiff-Intervenor,	)	
	)	
v.	)	
	)	
KOCH PETROLEUM GROUP, L.P.	)	
	)	
Defendants.	)	
	)	

FIRST AMENDMENT TO CONSENT DECREE

WHEREAS, Plaintiff, the United States of America ("Plaintiff"), acting on behalf of the United States Environmental Protection Agency ("EPA"), the State of Minnesota on behalf of the Minnesota Pollution Control Authority ("MPCA" or "Plaintiff-Intervener"), and Koch Petroleum Group, L.P. ("Koch" or "Defendant") are parties to a Consent Decree entered by this Court on April 25, 2001; and

WHEREAS, the parties have styled this document as the "First Amendment to Consent Decree" because they are filing with, and seeking the approval of, this Court; and

WHEREAS, the parties have previously amended the Consent Decree by their written agreement in accordance with Paragraph 153. The prior amendments are documented by the written correspondence of the parties dated August 26, 2003 and December 31, 2003; and

WHEREAS, in January 2002, Koch Petroleum Group, L.P. changed its name to Flint Hills Resources, LP ("FHR"), and for purposes of this First Amendment, Defendant shall be referred to as FHR.

WHEREAS, FHR has agreed to the reduction of nitrogen oxides emissions ("NOx") from the fluidized catalytic cracking unit ("FCCU") at its Pine Bend, Minnesota, refinery; and

WHEREAS, the parties agree that FHR needs additional time to undertake catalyst and technology testing for NOx emissions from the Pine Bend FCCU and that such testing will assist in determining the most appropriate NOx limit for that unit; and

WHEREAS, FHR is proceeding with additive studies at the Pine Bend, Corpus Christi, Texas, East and West refineries; and

WHEREAS, FHR has agreed to operate under an initial NOx emission limit until such time as a final NOx emission limit for each FCCU is established; and

WHEREAS, the United States and FHR believe that additional time is also necessary to determine the final control option of the two boilers at the Corpus Christi East Refinery, and

WHEREAS, the parties seek to establish a process for addressing leaks of process fluids into non-contact, recirculating cooling tower systems under EPA's National Emission Standard for Benzene Waste Operations regulation at 40 C.F.R. Part 61, Subpart F ("Benzene Waste NESHAP"). The parties recognize that the current regulation does not specifically address the issue and that FHR does not waive any legal argument it may have regarding the applicability of the Benzene Waste NESHAP regulation to such leaks; and

WHEREAS, each of the undersigned has reviewed and hereby consents to this First Amendment;

NOW, THEREFORE, the United States, Plaintiff-Interveners, and FHR hereby agree that upon entry of this First Amendment by the Court, the Consent Decree entered on April 25, 2001, shall be modified as follows:

A. In General

1. All references to "Koch Petroleum Group, LP" and "Koch" are replaced with "Flint Hills Resources, LP" and "FHR," respectively to reflect the Defendant's name change.

B. Section IV. Pollution Reduction Measures
A. NOx Emissions Reductions from Heaters and Boilers

2. Paragraph 15 is amended to read as follows:

By no later than December 31, 2005, FHR shall submit to EPA a Final Determination of Infeasibility, which will include those heaters and boilers that FHR proposes to exempt, on the basis of technological or economical infeasibility, from further burner technology upgrades for NOx control as required by Paragraphs 10 and 14. FHR shall include in the Final Determination its basis for the determination of infeasibility. EPA shall provide a written response within ninety (90) days of receipt of the Final Determination.

3. Paragraph 16 is amended to read as follows

By no later than December 31, 2006, FHR will have installed current or next generation ultra low-NOx burners, or an alternate emission reduction technology as specified in Paragraph 14, on all heaters and boilers of over 40 MM BTU/hr (HHV), except as listed below:

a. The above-referenced technology is not required on heaters and boilers identified pursuant to Paragraph 15 (Final Determination of Infeasibility as approved by

EPA);

b. The above referenced technology will not be required on the following heaters and boilers if FHR can establish that such heater or boiler will not emit more than 0.045 lb NOx/ MM BTU (HHV) consistent with Paragraph 62 and that an emission limit is imposed on such heater or boiler in a federally enforceable non-title V permit that ensures that the heater or boiler will not emit more than 0.045 lb NOx/MM BTU (HHV) consistent with Paragraph 62:

Corpus Heater 31B1A

Pine Bend Heater(s) 37H 3/4/5; and

c. FHR must install next generation ultra low-NOx burners, or an alternate emission reduction technology on Corpus Christi East Boilers E10B8 and E10B9 no later than June 30, 2008.

4. Paragraph 20 is amended as follows:

On heaters and boilers with capacity of 150 MM BTU/hr (HHV) or greater, FHR shall install and operate CEMS for NOx on such heaters and boilers in accordance with Paragraph 45(c), within 180 days after the control technology required by the Consent Decree begins operation.

C. Section IV. Pollution Reduction Measures
B. NOx Emission Reductions from FCCUs

5. Paragraph 30(b) is amended to read as follows:

Within 18 months following the startup of the combined technology system, FHR will evaluate the success of this system based on the actual hourly, daily, weekly, and annual average NOx concentration in the regenerator flue gas using CEMS and/or performance tests, and will report this information to EPA within 21 months of startup.

6. Paragraph 35 is amended to read as follows:

Pursuant to this Consent Decree, FHR will

(a) Implement the following actions at the Corpus Christi West FCCU:

(i.) By August 31, 2005, conduct a test study on the use of the Englehard partial-burn NOx additive.

(ii.) By November 30, 2005, provide an analysis of the test study in (i) to EPA and a determination as to whether the results of the study warrant further testing of the additive use after the SNCR installation.

(iii.) Install SNCR system at the next scheduled turnaround, which is to begin no later than December 31, 2006.

(iv.) Within 90 days after startup of the FCCU from the turnaround in (iii), begin operation of the SNCR system alone, or, if applicable under (i) and (ii) above, in combination with the NOx reducing additive that will yield the lowest feasible NOx concentration in the FCCU regenerator flue gas.

(v.) Provide quarterly data summaries to EPA for a period of 18 months (or

longer if mutually agreed upon by EPA and FHR) after the startup of the SNCR on (1) the NOx emissions resulting from the operation of the SNCR and the additive, if applicable, and (2) other operational data agreed to by EPA and FHR.

(vi.) Propose a 365-day rolling NOx emission limit pursuant to Paragraph 38 within 21 months after the startup of the SNCR based on the evaluation of the data collected during the 18-month period (or longer as agreed upon) of operation discussed in (v).

(b) FHR will implement the following actions at the Corpus Christi East FCCU:

(i.) Install an SNCR system at the next scheduled turnaround, which is to begin no later than December 31, 2008.

(ii.) Within 90 days of startup of the SNCR from the turnaround in (i), begin operation of the SNCR system using an enhanced reductant (such as hydrogen) alone and in conjunction with the combination of low-NOx combustion promoter and NOx eliminating catalyst that will yield the lowest feasible NOx concentration in the FCCU regenerator flue gas.

(iii.) Provide quarterly data summaries to EPA for a period of 18 months (or longer if mutually agreed upon by EPA and FHR) after the startup of the SNCR on (1) the NOx emissions resulting from the operation of the SNCR and the additive, if applicable, and (2) other operational data agreed to by EPA and FHR.

(iv.) Propose a 365-day rolling NOx emission limit pursuant to Paragraph 38

within 21 months after the startup of the SNCR based on the evaluation of the data collected during the 18-month period (or longer as agreed upon) of operation discussed in (v).

7. Paragraph 36 is amended to read as follows:

[Reserved]

8. Paragraph 37 is amended to read as follows:

[Reserved]

9. Paragraph 38 is amended to read as follows:

FHR shall submit, within the report required in Paragraph 30(b), a 365-day rolling average initial NOx emission limit for the FCCU located where FHR conducted the combined technology test. Upon submission of this initial limit, and the submission of the initial limits for the technology tests required in Paragraphs 35(a) and (b), respectively, and until such time as limits are finalized, FHR will comply with the initial NOx emission limits. EPA and FHR, in consultation with the appropriate state agency, will use the data collected, the level of demonstrated performance, process variability, reasonable certainty of compliance and any other pertinent information to establish final NOx emissions limits for each FCCU.

10. Paragraph 39 is amended to read as follows:

No later than 90 days following the end of the next scheduled turnaround in 2003 of the Pine Bend FCCU, FHR will reduce SO_2 emissions from the Pine Bend FCCU and comply with a limit of 25 ppmvd (at 0% oxygen) SO_2 on a 365 day rolling average basis. At the same time, FHR shall also meet a limit of 50 ppmvd (at 0% oxygen) on a 7-day average identical to the averaging period used in NSPS Subpart J for the FCCU located at Pine Bend. FHR may elect

any means for attaining these reductions. Emissions during periods of Startup, Shutdown, Maintenance or Malfunction shall not be considered in determining compliance with the 7-day rolling average SO2 emissions limit for the Pine Bend FCCU of 50 ppmv, provided that during such periods FHR implements good air pollution control practices for minimizing SO2 at the Pine Bend refinery.

D. Section V. Program Enhancements Re: Benzene Waste NESHAP

11. Paragraph 69 is amended to read as follows:

69. (a) Spills. FHR shall continue to review all spills within the refinery to determine if benzene waste was generated. FHR shall continue to account for all benzene wastes generated through spills that are not managed solely in controlled waste management units in its annual calculation against the 6BQ or 2MG compliance option as applicable.

69. (b) Leaks into Cooling Towers. Effective beginning January 1, 2005, FHR shall follow the procedures outlined in this subparagraph (b) for addressing any benzene associated with leaks of process fluids into non-contact, recirculating cooling tower systems (herein referred to as cooling tower systems) for the purpose of compliance with the Benzene Waste NESHAP. Consequently, the "point of waste generation" under 40 C.F.R. Sec. 61.341 of any of the FHR cooling tower systems affected by the Consent Decree shall be considered to be the point where the water is blown down to a sewer drain or other wastewater conveyance. For the avoidance of doubt, this means that so long as the facility is complying with the monitoring and repair requirements of subparagraph (b), cooling tower water combined with process fluids that have leaked into the cooling tower system shall not be considered a waste stream until after such water has been blown down to a wastewater conveyance.

69. (b)(i) Applicability. The monitoring and sampling requirements of this subparagraph (b) shall apply to all cooling tower systems at the Corpus Christi East, Corpus Christi West, and Pine Bend facilities that have the potential to come in contact with process fluids that have a benzene content of 0.1 wt% or greater. The potential to come in contact is present because of the possibility of process leaks even if the system is considered non-contact.

69. (b) (ii) Daily Parametric Monitoring. FHR shall perform at least one of the following types of parametric monitoring daily for each of the affected cooling tower systems: (A) Visual or olfactory observations for hydrocarbons; (B) Chemical use mass balance; (C) Microbiological growth detection; or (D) pH monitoring. If the results of such monitoring, alone or in conjunction with other process knowledge, indicate the likely presence of benzene in excess of 1 ppmw in the cooling water, FHR shall obtain three representative samples of water from a cooling tower riser located at the potentially-impacted cooling tower(s) within 24 hours, and shall transmit the samples within 72 hours by next day delivery to an external lab for analysis utilizing one of the test methods in 40 C.F.R. Sec. 61.355(c)(3)(iv).

69. (b)(iii) Detection of Benzene in Cooling Water. Once FHR has detected the presence of benzene greater than 1 ppmw in the cooling water prior to entering a cooling tower riser as provided in subparagraph (b)(ii), additional water samples required by subparagraph (b)(ii) are not needed until such time after the source of the benzene has been repaired, even though subsequent parametric monitoring (e.g., pH monitoring) conducted up to and until the repair continues to indicate the presence of benzene. FHR shall collect and analyze additional water samples in accordance with subparagraph (b)(ii) if parametric monitoring or other process knowledge indicates that a new leak has likely occurred.

69. (b)(iv) Periodic Cooling Tower Sampling at Pine Bend Refinery. FHR Pine Bend shall obtain three representative samples of the cooling water from each applicable cooling tower once per calendar month and will transmit such samples within 24 hours by next day delivery to the external lab for analysis using one of the test methods in 40 C.F.R. Sec. 61.355(c)(3)(iv).

69. (b)(v) Cooling Tower Sampling at Corpus Christi East and West Refinery. At the Corpus Christi refineries, FHR shall monitor the exhaust of each of its applicable cooling water strippers for VOC content once per calendar month. If a VOC reading is greater than 5 ppmv, and/or any other process knowledge indicates the likely presence of benzene in excess of 1 ppmw in the cooling water, FHR shall obtain three representative samples of the water entering the potentially impacted cooling tower and will transmit such samples within 24 hours by next day delivery to the external lab for analysis using one of the test methods in 40 C.F.R. Sec. 61.355(c)(3)(iv). Once a leak has been identified and until it has been repaired, subsequent VOC monitoring that continues to indicate the same leak does not give rise to a requirement to obtain additional water samples, except as needed by FHR to determine if the leak has changed or unless VOC monitoring or process knowledge indicates that a new leak likely has occurred.

69. (b)(vi) Repair Deadline for Confirmed Leak. If FHR determines, through the water sampling and benzene analyses referenced in subparagraphs (ii), (iii), (iv), or (v) that a leak from process equipment has caused the benzene concentration in the cooling water prior to entering the cooling towers to exceed 1 ppmw, FHR shall repair the leak within 45 days after the date that FHR identifies the equipment that is leaking. FHR shall make all reasonable efforts to identify the leaking equipment as expeditiously as possible, but in no case shall the identification period exceed 30 days from the date the laboratory analysis indicates that there is the presence of

benzene in excess of 1 ppmw in the cooling tower system. The period to identify a leak may be extended beyond 30 days upon the consent of EPA.

69. (b)(vii) Exclusions to the Repair Deadline. This 45-day deadline to repair is not applicable if one or more of the following criteria is met:

(A). The equipment that is causing the leak is isolated from the process as soon as practical, but no longer than 45 days from when FHR identified the leaking equipment;

(B). The necessary parts are not reasonably available (in which case, the repair must be completed within 120 days of the date the leaking equipment is identified);

(C). Shutdown of the affected unit is already planned to occur within 60 days from the date the leaking equipment is identified;

(D). Shutdown for repair would cause greater emissions than the potential emissions that would result from a delay of repair (in which case FHR must make that calculation prior to relying on this exemption);

(E). The process fluid has been prevented from leaking into the cooling tower system via a process or system change; or

(F). Subsequent samples (utilizing 2 representative samples) confirm that the concentration of benzene in the cooling water prior to the cooling tower is less than 1 ppmw.

69. (b)(viii) Confirmation of Repair. Once FHR has identified and corrected a leak pursuant to (vi) above, it shall conduct water sampling within 14 days of the repair or startup, which ever is later, to confirm that the benzene concentration in the cooling water prior to the

cooling towers is less than 1 ppmw. The confirmation sampling may occur later if more time is needed to obtain a reliable sample due to water quality problems. At no time shall the confirmation sampling exceed 30 days after the repair or startup. If the confirmation sampling demonstrates that there is still a leak in the cooling tower system above 1 ppmw, then a new 45-day repair deadline shall commence on the date of such confirmation.

12. Paragraph 74 is amended to read as follows:

74. Beginning with the first full calendar quarter commencing January 1, 2001 (except for the requirements in Paragraph 74(e) , which FHR is not responsible to begin until the first full calendar quarter commencing after January 1, 2006), FHR shall submit to the appropriate state and EPA, office the following information for each of its refineries as part of the report required by 40 C.F.R. Sec. 61.357(d)(7):

Paragraph 74(e) is added to read as follows:

(e.) FHR shall list those leaks identified during the previous quarter, the date the leak was confirmed (i.e., that is the date on which the result of greater than 1 ppmw was obtained via analysis using one of the test methods in 40 C.F.R. Sec. 61.355 (c)(v)(iv)), the date the leaking equipment was identified, the date each such leak was repaired (including any reason for delay), and the date of the confirmation sampling to determine if the repair was successful.

E. Section VII. Program Enhancements Re: NSPS Subparts A and J Sulfur Dioxide Emissions from Sulfur Recovery Plants ("SRU") and Flaring Devices

13. Paragraph 101(a) is amended as follows:

(a) INVESTIGATION AND REPORTING: No later than forty-five (45) days following the end of an AG flaring Incident or an event identified in Paragraph

100, FHR shall submit a report to the applicable EPA regional office and the applicable State Agency that sets forth the following:

F. Section XI. General Recordkeeping, Record Retention, and Reporting

14. Paragraphs 114 and 115 are amended to read as follows:

114. FHR shall submit semi-annual reports to EPA and the appropriate state agencies. Semi-annual reports shall be submitted by July 31 (covering the period from January 1 to June 30) and January 31 (covering the period from July 1 to December 31), with the first such report due on July 31, 2006. The reports shall contain the following information:

(a.) a progress report on the implementation of the requirements of Parts IV-VIII (Compliance Programs) above;

(b.) a summary of all Hydrocarbon Flaring Incidents;

(c.) a description of any problems anticipated with respect to meeting the Compliance Programs of Parts IV-VIII of this Consent Decree; and

(d.) a description of all environmentally beneficial projects and implementation activity in accordance with Part IX of this Consent Decree.

(e.) In each semi-annual report, a summary of all exceedances of emission limits required or established by this consent decree. The semi- annual report shall include:

(i) for emission units monitored with CEMs or PEMs, for each CEMs or PEMs:

(A) total period where the standard was exceeded, if applicable, expressed as a percentage of operating time for each calendar quarter;

(B) where the unit has exceeded the standard more than 1% of the total operating time of the calendar quarter, identification of each averaging period that exceeded the limit by time and date, the actual emissions of that averaging period (in the units of the standard), and any identified cause for the exceedance (including startup, shutdown, maintenance or malfunction), and, if FHR claims a malfunction caused the exceedance, a detailed explanation and any corrective actions taken;

(C) total downtime of the CEMs or PEMs, if applicable, expressed as a percentage of operating time for the calendar quarter;

(D) where the CEMS or PEMS downtime is greater than 5% of the total operating time in a calendar quarter for a unit, identify the periods of downtime by time and date, any identified cause of the downtime (including maintenance or malfunction), and, if FHR claims a malfunction caused the downtime, a detailed explanation and any corrective action taken;

(E) if a report filed pursuant to another applicable legal requirement contains all of the information required by this subsection (e.)(i) in similar or same format, the requirements of this subsection (e.)(i) may be satisfied by attaching a copy of such report;

(ii) for emissions units monitored through stack testing:

(A) a summary of the results of the stack test;

(B) a copy of the full stack test report;

(C) to the extent that FHR has already submitted the stack test results, FHR need not resubmit them, but may instead reference the submission in the report (e.g., date, addressee, reason for submission).

(f.) In the semi-annual report required on July 31 of each year, a summary of the annual emissions data for the prior calendar year. The summary shall include for each refinery:

(i) NOx, SO_2, CO and PM emissions in tons per year for each heater and boiler;

(ii) NOx, SO_2, CO and PM emissions in tons per year for each FCCU;

(iii) SO_2 emissions in tons per year from each Sulfur Recovery Plant;

(iv) SO_2 emissions in tons per year for each flare;

(v) NOx, SO_2, PM and CO emissions in tons per year as a sum for all other emissions units not identified above; and

(vi) for each of the above estimates in (i) through (iv), the basis for the estimate (e.g., stack tests, CEMs, PEMs, etc.) and an explanation of the methodology.

(vii) if a report filed pursuant to another applicable legal requirement contains all of the information required by this subsection (f) in similar or same format, the requirements of this subsection (f) may be satisfied by attaching a copy of such report.

115. Each portion of the semi-annual report which relates to a particular refinery covered by the report shall be certified by either the person responsible for environmental management and compliance for that refinery, or by a person responsible for overseeing implementation of this Decree across FHR as follows:

> I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

G. Section XIII. Stipulated Penalties.

15. Paragraph 120(b)(iii) is amended to read as follows:

(iii) Failure to meet emission limits established pursuant to Part IV, Section B, per day, per unit: $1500 for each calendar day on which the specified rolling average exceeds the applicable limit. Stipulated penalties shall not start to accrue with respect to a final NOx emission limit until there is noncompliance with that emission limit for five percent (5%) or more of the applicable FCCU's operating time during any calendar quarter.

16. Paragraph 120(c)(iii) is amended to read as follows:

(iii) Failure to meet final emission limits for the FCCU exhaust gas at each refinery, per day, per unit: $2500 for each calendar day on which the specified rolling average exceeds the applicable limit. Stipulated penalties shall not start to accrue with respect to a final SO2 emission limit until there is noncompliance with that emission limit for five percent (5%) or more of the applicable FCCU's operating time during any calendar quarter.

H. Section XVIII. General Provisions

17. Paragraph 148. Notice

As to Flint Hills Resources, LP:

" James L. Mahoney, Executive Vice President, Operations, Koch Petroleum Group, L.P., P.O. Box 2256, Wichita, KS 67201" will be deleted and replaced with "Joe Coco, Executive Vice President of Operations, Flint Hills Resources, LP, P.O. Box 2917, Wichita, KS 67201." In addition, "William A. Ferking, Associate General Counsel, Koch Industries, Inc., P.O. Box 2256, Wichita, KS 67201" will be deleted and replaced by "Robert J. Mueller, Senior Counsel, Flint Hills Resources, LP, P.O. Box 2917, Wichita, KS 67201."

18. Paragraph 149 is amended to read as follows:

149. Approvals. All EPA approvals or comments required under this Decree shall be

made in writing. All Minnesota approvals shall be sent from the offices identified in Paragraph 148.

19. Paragraph 153 is amended to read as follows:

153. Modification. Non-material modifications to this Consent Decree will be effective when signed in writing by EPA, FHR, and MPCA, if applicable to Pine Bend. The United States will file non-material modifications with the Court on a periodic basis. For purposes of this Paragraph, non-material modifications include, but are not limited to, modifications to the frequency of reporting obligations and modifications to schedules that do not extend the date for compliance with emission limitations following the installation of control equipment or the completion of a catalyst additive program, provided such changes are agreed upon in writing between EPA, FHR and MPCA, if applicable to Pine Bend. Material modifications to this Consent Decree will be in writing, signed by the Parties, and will be effective upon approval by the Court. Specific provisions in this Consent Decree that govern specific types of modification are superseded by this provision.

So entered in accordance with the foregoing this _____ day of _____, 2006.

_____

United States District Court Judge
For the District of Minnesota

FOR PLAINTIFF THE UNITED STATES OF AMERICA:

SUE ELLEN WOOLDRIDGE
Assistant Attorney General

DIANNE M. SHAWLEY
Senior Counsel
Environmental Enforcement Section
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
(202) 514-0096

THOMAS B. HEFFELFINGER
United States Attorney
District of Minnesota

FRIEDRICH A. P. SIEKERT
Assistant United States Attorney
Attorney ID No. 142013
District of Minnesota
U.S. Courthouse
300 S. 4th Street
Suite 600
Minneapolis, MN 55415

FOR THE U. S. ENVIRONMENTAL PROTECTION AGENCY:

Walker B. Smith
Director, Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Penn. Ave., NW
Mail Code 2241A
Washington, DC 20460

FOR PLAINTIFF-INTERVENER THE STATE OF MINNESOTA:

Sheryl Corrigan
Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155

3/15/06

Kathleen Winters
Assistant Attorney General
Minnesota Attorney General's Office
445 Minnesota Street
Suite 900
St. Paul, Minnesota 55101

FOR FLINT HILLS RESOURCES, LP :

Joe Coco
Executive Vice President, Operations
P.O. Box 2256
Wichita, Kansas 67201